

Natural Heritage & Endangered Species Program

Massachusetts Division of Fisheries & Wildlife

Route 135, Westborough, MA 01581

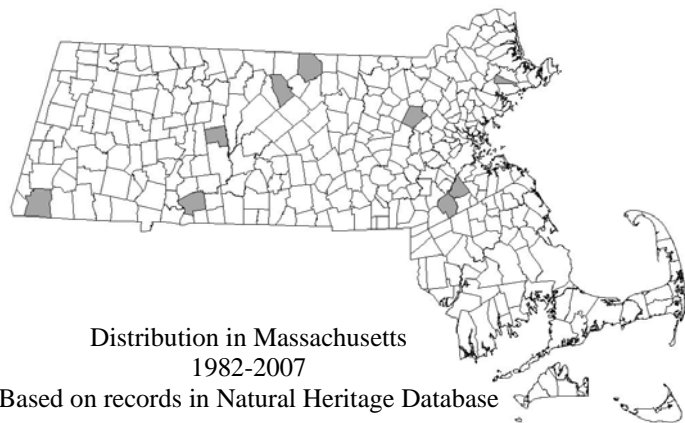
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www.nhesp.org

Description: Pod-grass (*Scheuchzeria palustris*) is an erect rush-like plant of open peatlands, with a cluster of greenish flowers, sheathing opposite leaves, and a zig-zag stem. Pod-grass, which blooms from May until July, is the sole species in its family (Scheuchzeriaceae).

Aids to identification: The zig-zag stem of Pod-grass grows 9 to 18 inches (20–40 cm) in height. The leaves are alternate, erect, and linear; they are 2 to 12 inches (5–30 cm) in length and about 0.1 inch or less (1–3 mm) in width. The stem leaves are well-separated, whereas the basal leaves are tightly clustered, with dilated bases that sheath the lower stem. The inflorescence consists of three to ten racemes of yellow-green flowers, each with three tepals (undifferentiated outer flower parts, similar to sepals and petals). Fruits are 0.2 to 0.3 inch (6–8 mm), and consist of three diverging foliicles, or “pods,” each with one or two small black seeds. A good time to survey for this species is from early July to early September, when the conspicuous fruit are present.

Similar species: Pod-grass has unique characteristics, and there are no other species in its genus or family. Species of the Arrow-grass family (Juncaginaceae) are closely related, but they have basal leaves only (no stem leaves). Some rushes (family Juncaceae) are superficially similar, but rushes have two perianth whorls (analogous to sepal and petals) rather than one, and the flowers are often subtended by leafy bracts.



Distribution in Massachusetts
1982-2007

Based on records in Natural Heritage Database

Pod-grass

Scheuchzeria palustris

State Status: **Endangered**

Federal Status: None



Gleason, H.A. 1952. *The New Britton and Brown Illustrated Flora of the Northeastern United States and Adjacent Canada*. Published for the New York Botanical Garden by Hafner Press. New York.

Habitat in Massachusetts: Pod-grass inhabits open acidic peatlands, often in areas that are dominated by sedges and sphagnum mosses (*Sphagnum* spp.). Associated species include Tawny Cotton-grass (*Eriophorum virginicum*), White Beak-sedge (*Rhynchospora alba*), Slender Woolly-fruited Sedge (*Carex lasiocarpa* var. *americana*), Large Cranberry (*Vaccinium macrocarpon*), Water-willow (*Decodon verticillatus*), Leatherleaf (*Chamaedaphne calyculata*), and Pitcher-plant (*Sarracenia purpurea*).

Threats: Threats to Pod-grass include changes in the water quality due to inputs of road salt or nutrients from septic systems or adjacent fertilized land (residential areas, golf courses, agricultural fields); alterations to the natural hydrologic regime that affect water levels; invasions by exotic invasive plant species such as Common Reed (*Phragmites australis* ssp. *australis*), Glossy Buckthorn (*Frangula alnus*), and Purple Loosestrife (*Lythrum salicaria*); trampling at sites with heavy recreational use; and over-shading from dense growth of associated shrubs, such as Leatherleaf.

Fruiting time in Massachusetts

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Range: The range of Pod-grass extends across much of the northern United States (north of Virginia, Indiana, Wyoming and California; and discontinuously in New Mexico) and Canada (minus Nunavut and Yukon Territories). Pod-grass is also rare in Alaska, Connecticut, Idaho, Montana, New York, North Dakota, Ohio, Pennsylvania, Rhode Island, Wyoming, Alberta, and Labrador. It is historically known from Illinois, Iowa, and West Virginia, and its status is under review in several states.

Population status in Massachusetts: Pod-grass is listed under the Massachusetts Endangered Species Act as Endangered. All listed species are legally protected from killing, collection, possession, or sale, and from activities that would destroy habitat and thus directly or indirectly cause mortality or disrupt critical behaviors. Pod-grass is currently known from Berkshire, Hampshire, Middlesex, Norfolk, and Worcester Counties, and is historically known from Essex, Franklin, and Hampden Counties.

Management recommendations: As with many rare species, the exact management needs of Pod-grass are not known. Protecting the habitat of this species requires maintaining high water quality and natural, stable water levels; this may involve restricting use of road salt and fertilizers in adjacent areas, and regulating water drawdown if the wetland has a dam or is used for irrigation.

Pod-grass habitat sites should be regularly monitored to enable early detection of invasive exotic species and to determine if the plants are becoming over-shaded. Acidic, low nutrient peatlands are generally inhospitable to many exotic species, but invasions can occur, particularly on the edges where nutrient levels are slightly higher, and in areas with anthropogenic nutrient inputs. At sites where Pod-grass is becoming over-shaded by dense shrubs, careful thinning can be implemented to restore an open character to the habitat.

To avoid inadvertent harm to rare plants, all active management of rare plant populations (including invasive species removal) should be planned in consultation with the Massachusetts Natural Heritage & Endangered Species Program.

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